NERC Data Value Checklist

Edition 2

Purpose and scope

The Data Value Checklist aims to identify which data should be maintained within the NERC Environmental Data Service (EDS) and to assist in retention decisions. For details on these processes see the EDS Acquisition, Data Preservation and Withdrawal policies.

The Data Value Checklist is intended to be used: -

- a) to assist data centre staff when preparing a full Data Management Plan with Principal Investigators, so that data of long-term value can be selected for long-term preservation.
- b) to assess the quality, integrity, originality, and content of data and metadata before ingestion into the EDS, so that actions to improve quality can be prioritised.
- c) to plan or reassess retention for data already held by EDS.

This will ensure that data included in collections are of long-term value to the scientific community.

The Data Value Checklist is not expected to give a definitive response to whether the data should be retained but will offer guidance on assessing their long-term value.

Checklist

Mandatory criteria: These are mandatory criteria and answering 'Yes' to one or more of the questions below will automatically result in selection for retention.

Legal/statutory considerations	Yes/No
Is there a legal or legislative reason for NERC to retain the data?	
Is there any obvious reason why the data may be used in litigation, public enquiries, police investigations or any report or paper that could be legally challenged?	
Are there any financial or contractual obligations that require us to retain the data?	

Important criteria: These are primary criteria and answering 'Yes' to at least one of the questions from each section below should probably result in selection for retention.

Policy	Yes/No
Are the data a result of full or partial NERC funded activities?	
Scientific or historic value	
Are the data a unique unrepeatable measurement of the environment?	
Do the data have a broad geographical or temporal extent that makes them suitable for reuse?	
Do the data have historic value i.e. do they represent a landmark in scientific discovery?	
Do the data include changes in processing methods, new standards or set any precedents?	
Do the data support current projects or are likely to support foreseeable future needs of the scientific community?	
Do the data contribute to a pre-existing collection?	
Is there any specific potential for re-use of the data?	
Are the data likely to be cited or referenced in a publication?	
Do the data underpin a policy decision/government document?	

Supporting criteria: These are important criteria and answering 'Yes' to the majority of the questions below should result in selection for retention.

Origin	Yes/No
Are the data unaltered with their original integrity retained?	
Would the data be costly to reproduce?	
Is the intention that the EDS becomes the archive of reference for this data, rather than just a secondary copy?	
Is there evidence of the data quality?	
Condition	
Do the data have relevant metadata available?	
Can the data be ingested into the Data Centre without significant additional processing? i.e. no need to filter, convert or aggregate.	
Are the data in a suitable condition for addition to the collections? i.e. readable and uncorrupted.	
Cost considerations	
Can the data be ingested into the Data Centre without incurring excessive costs?	
Can the data be stored without any exceptional requirements? e.g. is the data very large.	
Access/use	
Are the data free from any access or use constraints that would hamper reuse or curation?	
Formats/technical limitations	
Are the data in an acceptable (open and non-proprietary) format for deposit?	
Are the data accessible without any specialist software?	
If Yes to the question above, is any specialist software readily available to the Data Centre?	
Is it feasible for the data to be transformed to an appropriate format?	

Notes and References

- For general guidance on the selection of data for long-term preservation please see the <u>NERC EDS</u> Acquisition Policy.
- For general guidance on data retention see the <u>NERC EDS Data Preservation and Withdrawal Policy</u>
- This checklist was written using guidance from the digital curation centre. Whyte, A. & Wilson, A. (2010). "How to Appraise and Select Research Data for Curation". DCC How-to Guides. Edinburgh: Digital Curation Centre. Available online: https://www.dcc.ac.uk/guidance/how-guides/appraise-select-data
- The First Edition of this checklist was developed in the NERC Science Information Strategy Programme, 2010.
- This Second Edition of the checklist is the result of a review by the NERC Data Operations Group in July 2025.